EMIGRATION AND REMIGRATION OF OKINAWANS SETTLED IN THE LOWLANDS OF EASTERN BOLIVIA IN RELATION TO BACKGROUND CHARACTERISTICS OF THEIR PLACE OF ORIGIN

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Post-war Okinawans emigrated to the lowlands of Bolivia in an attempt of pioneer agricultural colonization were studied with regard to behavioral patterns of the adjustment process in terms of permanency in the newly created colony. The uniqueness of the post-war emigration to Bolivia by Okinawans is discussed in comparison with pre-war emigration and the inter-regional migratory flow. The permanency of Okinawan emigrants in Bolivia is analyzed in relation to background characteristics of their regional origin in Okinawa using Spearman's rank correlations between each pair of selected variables; the number of emigrants by municipality in Okinawa Prefecture, rate of persons who settled in the colony, rate of population engaged in the primary sector of economy in 1965 in Okinawa Prefecture, and rate of area for U.S. military use. The permanency of the migrants in colonization is related to the background characteristics in the place of their origin before emigration. The likelihood of emigrants settling in the colony is thus greater for those from less urbanized municipalities, the size of migrants from one municipality of the rural area signifying the permanency in the pioneer colonization project.

From the viewpoint of self-regulatory functions in a regional population, the population of Okinawa is of particular interest in the modern history of Japan. In a previous paper (Suzuki et al., 1974), different patterns of regional population growth of Ryukyu Islands were discussed for the period from 1920 to 1970. Both of the demographic trends, i.e., stability of regional population sizes of pre-war time and differential population growths in the post-war period were outcomes of population regulation by inter-regional and external migratory flow resulting from persisting population pressure and drastic changes in the politico-economic situa-

tion before and after the War.

This paper attempts to analyze behavioral patterns of migrating population, taking up an Okinawan emigrant population in the lowlands of Bolivia for discussion, and analyzing their background factors of motivation to migrate and behavioral aspects of adjustment in the pioneer colony. Okinawa is one of the eminent prefectures of Japan from where an enormous volume of people emigrated to Latin American countries (TIGNER, 1956: ISHIKAWA, 1974). Among the emigrants to Latin American countries, post-war emigrants to Bolivia are typical of government-organized independent pioneer agriculturists in tropical forests, while most of the pre-war migrants were permitted to immigrate to host countries only as indentured immigrants, generally as farm laborers on plantations. The pioneer colonization by Okinawans began in 1954, and the colony is located about 100 km north-east of the city of Santa Cruz, the capital of the Santa Cruz department. The present study focusses on the regional background of emigrants in Okinawa and explores influencing factors of the place of origin of emigrants which may color their adjustment behavior in the colonization attempt in the lowlands of eastern Bolivia.

OUTLINE OF POPULATION GROWTH AND MIGRATION IN OKINAWA

Pre-war trend. There had been no substantial changes in size and distribution of regional population in the pre-war period (1920–1940) in Okinawa. The natural increase in the 1930s was between 7.7 and 11.6 per thousand (Statistical Yearbook of Okinawa, 1974). Despite the natural increase of that time, the population of Okinawa was maintained at about 600,000; 572,000 in 1920 and 575,000 in 1940. Given a natural increase of 1%, the 572,000 population in 1920 should have reached 698,000 in 20 years. There is a general acceptance that the stability of Okinawan population was maintained by massive volume of outward migration as a palliative of population pressure (TAEUBER, 1963: SUZUKI et al., 1974: MCCUNE, 1975a). The estimated loss of population by migration then was 123,000 during the period from 1920 to 1940.

The overseas migration of Okinawans began in 1899 to Hawaii as farm laborers. By counting the yearly number of Okinawan emigrants from 1899 to 1938 (the termination year of pre-war emigration), the total number is 72,000. Fifty thousands of emigrants went to Hawaii, North America (including Canada, the U.S. mainland and Mexico), or Latin American countries (Table 1). In this table, the number of overseas emigrants from 1921 to 1938 is 41,000, which is not in agreement with the above mentioned estimated loss of population in this period. The difference between two figures indicates that 60 to 70 thousands of population migrated to Japan proper or Japanese-mandated territories such as Micronesia and Formosa. However, to the best of our knowledge, there is neither a yearly record of population flow to Japan proper nor to Japanese mandated territories. The only available data which chart the Okinawan residents outside of Okinawa

The state of the s	1899–1910	1911–1920	1921–1930	1931–1938	Total
Hawaii	9,654	7,216	2,155	1,093	20,188
North America*	769	546	620	148	2,083
South America**	559	9,031	9,414	8,930	27,934
Philippines	488	1,007	7,803	7,128	16,426
Singapore	-	25	1,480	1,246	2,751
S.E. Asia and S.W. Pacific.	959	250	697	529	2,435
Total	12,429	18,075	22,169	19,074	71,747

Table 1. Emigration from Okinawa Prefecture from 1899 to 1938.

Source: Kaigai Tokōsha Sū (Number of Emigrants), Ryukyu Kaigai Kyōkai, 1956.

Table 2

Pegional pattern of migration

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	I. Pre-war emigrants up to 1935	II. Pre-war outward mi- grants to other prefectures of Japan up to 1935	I/II	III. Post-war emigrants 1954–1973	IV. Post-war emigrants to Bolivia 1954–1973
Northern Okinawa	11226 (0.263)	11141 (0.345)	1.01	2530 (0.207)	874 (0.263)
Middle Okinawa	17214 (0.403)	6035 (0.187)	2.85	5220 (0.428)	1177 (0.354)
Southern Okinawa	14126 (0.331)	13464 (0.416)	1.05	4377 (0.359)	1228 (0.369)
Sakishima	103 (0.002)	1695 (0.052)	0.06	69 (0.006)	46 (0.014)
Total	42669 (1.000)	32335 (1.000)	1.32	12196 (1.000)	3325* (1.000)

Source; I, II: Okinawa Kenshi No. 7, Imin, Annexed Tables p. 20-25, 34-63. III, IV: Kaigai Ijyū Dokuhon (1973), Okinawa Prefecture (prefectural government).

Northern Okinawa; Kunigami Gun (county), Middle Okinawa; Nakagami Gun Southern Okinawa; Shimajiri Gun

Prefecture in 1935 is shown in Table 2. According to this record, the Okinawans living overseas amounted to about 43 thousands, those in Japan proper 32 thousands, and in Japanese-mandated lands 18 thousands. Relative importance of overseas migration in the Okinawan population movement is clear.

Both the emigrants and outward migrants from Okinawa Prefecture were almost all from the main island of Okinawa (Okinawa Island), and the emigrants from the peripheral islands such as Sakishima (Miyako and Yaeyama Islands) were extremely small in number. This may be explained by the difference in available arable land between Okinawa Island and Sakishima and the high population density in Okinawa Island. There was an attempt to establish new settlements in Ishigaki Jima and Iriomote Jima of Yaeyama Island, and Okinawans in Okinawa

^{*} Includes the mainland USA, Canada, Cuba and Mexico.

^{**} Includes Peru, Brazil, Argentina and Bolivia, 94% of Okinawans to south America emigrating to Peru and Brazil.

^{*} Includes emigrants sent for by relatives or friends before 1954.

Island was urged to migrate there, but devastation by malaria prevented successful pioneer settlement. The increase in population of Yaeyama began after the war.

Post-war trend. The ravages of World War II were extremely great in Okinawa. The losses of civilian population at the battle of Okinawa in 1944 were much greater than military casualities. The number of civilian casualities differ in estimations between 100,000 (McCune, 1975b) and 150,000 (Kunigami Son, 1967). Soon after the end of the war, outward migrants in Japan proper, and the Japanese-mandated islands of Micronesia or Formosa were repatriated to their native island. Those repatriated from Hawaii, North America, and Latin American countries were few. The number of repatriates were estimated at 150,000. Thus, the losses due to the war were compensated by an almost equal number of repatriates, but the then existing Japanese political, social and economic orders had to be changed, and Okinawa became a closed area under the U.S. Civil Administration of Ryukyu islands.

Since the repatriation from outside Okinawa was completed by 1950, the population that increased from 575,000 in 1940 to 699,000 in 1950 was outcome of net balance of natural increase, losses by the war, and repatriation. Thenceforth, the population of Okinawa continued to increase, and grew to 801,000 by 1955. The increase during this period was, roughly speaking, simply due to a natural increase, since no mass emigration had occurred. The annual natural increase was 2.8 percent during the period from 1950 to 1955. This value is very high compared with that of estimated values (0.8 and 1.2 percent) in the 1930s. The increasing size of population should have claimed adjustment to islands population.

The increased population in each municipality in Okinawa was gradually redistributed, and the growing urbanized core of the Naha and Koza areas primarily absorbed the rural population. The migratory flow of population became clearer after the early 1950s in the form of a concentric pattern of population flow to urbanized core (Suzuki et al., 1974). This pattern may have been a new adjustment of repatriates or rural population to the rapid increase of population. The post-war development of the urbanized core and growth of other cities were accelerated by the United States expenditure for military bases and accommodations which enlarged opportunities of employment for the Okinawan population. The development of Okinawan economy paralleled the outbreak of Korean War in 1950 and intensive U.S. involvement in the Vietnam War in the 1960s. However the rapid increase of population in the 1950s should have enhanced population pressure, and it seemed that the growing urbanization did not necessarily relieve such pressure completely.

EMIGRATION TO BOLIVIA

The population pressure of Okinawa, especially in rural area of Okinawa Island, became greater after the war by natural increase and returning repatriates.

The potentiality of outward migrants to Japan proper was not easy due to the immigration laws and little chance of getting a job in economically damaged Japan proper. The Ryukyu Islands began to form a closed microcosm under the U.S. Civil Administration and the Ryukyu government. As said previously, population pressure was partly adjusted by inter-regional flow of population, *i.e.*, the absorption of population by urbanized core or military employment. But some substantial surplus of population had to be relieved by other countermeasures. The Ryukyu government then consider overseas emigration, which was a major way of maintenance of balance between growing population and limited resources in pre-war times.

The first emigration of Okinawans after the war began in 1948 when 33 individuals were sent for by relatives Argentina. The emigrants to other Latin American countries were also restricted to those being who were sent for by relatives or friends in host countries. Thus, there were serious restrictions by host countries to large numbers of immigrants in the early 1950s.

The survey of Okinawans in Latin American countries by TIGNER (1956) of Stanford University provided a key to the emigration project of Okinawans. His broad contacts with the official personnels of the U.S. Civil Administration, the Ryukyu government, and Okinawans in Bolivia initiated an emigration plan of Okinawan population to Bolivia. He reported that Bolivia was the only Latin American Country that would admit Okinawans without serious restrictions, and that there were favorable conditions for the emigration to Bolivia which might resolve the population pressure in the Ryukyu Islands (TIGNER, 1956). The Republic of Bolivia had intensively promoted a colonization program in sparsely populated tropical lowlands since 1953 following the enactment of new agrarian reform laws, and resettlement from highlands to lowlands was encouraged. Foreigners were also welcomed as pioneer agriculturists in this region. The Okinawans in Bolivia, pre-war immigrants and their descendents numbering 314 in 1952 (TIGNER, 1956), organized the Agricultural Society to receive Okinawan colonists in the Santa Cruz region. The 50 hectares of land for each family was provided free of charge by the Bolivian government.

Colonization of Okinawans in Bolivia was encouraged both by the Ryukyu government and by the U.S. Civil Administration of the Ryukyu Islands, providing grants for passage expenses and allocating fund for the colony to establish basic facilities. The financial aid by USAID and Point Four continued after the immigration of Okinawans into Bolivia.

The emigration of Okinawans to Bolivia started in 1954 with the first group of 278 individuals and a second group of 127. The initial site selected for the colony named "Uruma" was unfortunately abandoned in 1955 because of a severe attack of an unknown jungle fever which saw 192 cases 15 of which died (Schaeffer, 1959). The present site was the third selection in 1956, and colonization of Okinawans continued there. Table 3 shows Okinawan emigration during

Year	Emigrants	Year	Emigrants
1954	405	1964	102
1955	122	1965	
1956		1966	and the same of th
1957	214	1967	*****
1958	437	1968	26
1959	453	1969	34
1960	309	1970	5
1961	482	1971	
1962	509	1972	19
1963	198	1973	
		1974	1
		Total	3.316

Table 3. Okinawan emigration to Bolivia from 1954 to 1974.

Source: *Kannai Gaikyō*, Kokusai Kyōryoku Jigyō Dan, Santa Cruz *Shibu*, 1975. Mimeographed. Santa Cruz, Bolivia.

the period from 1954 to 1974. The emigrants to Bolivia in this period (3316 individuals), were about 25% of the emigrants to Latin America. It was the period from 1955 to 1962 that the migration to Latin America took place mostly (McCune, 1975b); the same is the case for the emigration to Bolivia. After this period, the emigration continued mostly by the system of sending newcomers to join earlier migrants.

RELATION BETWEEN MIGRANTS' BACKGROUND IN OKINAWA AND PERMANENCY IN THE COLONY

Remigration of Okinawans in Bolivia

Total

During the course of attempting to pioneer a new settlement, about 56% of the total number Okinawan immigrants moved out from Colonia Okinawa up to July, 1974 (Table 4). When the settlers moved from the colony and what was the

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Country	Number of remigrants	
Brazil	1,032	
Argentina	388	
U.S.A.	5	
Japan	273	
Bolivia	146	
Unknown	5	

Table 4. Destination of remigrants from Colonia Okinawa in Bolivia (July 1974).

1,849

^{*} Total number of emigrants from Okinawa Prefecture was 3316 during the period 1954–1974.

major motivation of remigration was not known from the remaining record nor by an interview survey of the population staying in the present colony. It is said that most of the remigrants moved to places where relatives, friends or neighbors of their native Okinawa were living. The majority remigrated to Brazil where the earlier Okinawan immigrants had established a large Okinawan society network. The following section deals with background characteristics which may have affected the behavior of immigrants in the Okinawan colony in Bolivia.

Hypothetical frame

The main concern of this study is to determine factors which affected the adjustment behavior of pioneer settlers in the course of colonization in the low-lands of eastern Bolivia. Among different patterns of adjustment behavior, one of significant features of the pioneer colonists' behavior is whether they settle at the site or not. In other words, this refers to permanency of the settlers in a pioneer colonization attempt. Our temporal hypothesis is that adjustment behavior of pioneer colonists is not free from influences of the background factors derived from the place of origin.

Material

The lists of all the emigrants to Bolivia with their residential places in Okinawa before emigration and the lists of all the members who stayed at Colonia Okinawa in Bolivia in 1973 were available at the branch office of Japan International Cooperation Agency in Naha, Okinawa Prefecture. Since there were no records on the individual socio-economic status just before emigration, the background data were sought for the socio-economic situation by municipality when the emigrants had embarked. However, the records or statistics which gave descriptions on the emigrants' background in their native place were scanty. The only available and reliable data were from the Provisional Census of Okinawa in 1965 (Government of the Ryukyu Islands, 1967). From these statistics we were able to obtain, as an indicator representing socio-economic situations of municipalities, the rate of population engaged in the primary sector of economy (i.e., agriculture, forestry, and fishery) in each municipality. The rates of area under the U.S. military curtailment were obtained, as an influencing factor for emigration, from the Manual Book of Municipalities of Okinawa (Okinawa Chō-Son Kai, 1971).

Data were assorted into groups by municipalities. The variables used in the analysis were as follows; number of emigrants by municipality of origin in Okinawa Prefecture, rates of persons remaining in the colony, rates of population engaged in the primary sector of economy in 1965, and rate of area for military use. The correlations between each pair of these variables were examined by Spearman's rank correlation coefficients.

RESULTS

The results are shown in Table 5. It is indicated that those who migrated from a municipality with a high proportion of population engaged in the primary sector of economy are more likely to stay in the colony. The results also indicate that when the rate of population in the primary sector of economy is fixed the partial correlation coefficient between the number of emigrants and the rates of persons who settled in the colony become significant. In other words, the emigrants coming from the rural areas, who frequently had neighbourhood bonds or kinship ties (ISHIKAWA, 1974), are more likely to remain in order to pioneer a new settlement in the lowlands of Bolivia.

As has been noted before, a considerable portion of emigrants to Bolivia were migrants forced to leave Okinawa because the curtailment of arable land for military bases or accommodations in the middle of Okinawa Island, e.g., the dwellers in the city of Koza, and villages of Kadena, and Yomitan. But a high rate of curtailed area for military use does not necessarily correlate with the increase of emigrants. For instance, while the village of Kadena had 87.5% of its area taken for the U.S. military use and Yomitan 42%, the emigrants from these villages numbered 65 and 363 persons, respectively. There are no correlations between the number of emigrants and the rate of area for military use by municipality (r_s =0.113), and the correlations between these parameters by municipalities with different rates of area for military use (0-9%, 10-29%, and 30% and over) are also not significant. It should be mentioned that the U.S. military installation

•	All Okinawa	Rate of area for U.S. Military use. ³				
$r_{\rm s}^{-1}$	districts ²	0–9%	10–29%	30% and over		
	Sin	nple correlation coe	efficient			
rab	0.434**	0.522*	0.367	0.194		
$r_{\rm ac}$	0.313	0.357	-0.283	0.691*		
$r_{ m bc}$	-0.094	0.044	-0.433	0.103		
	Pa	rtial correlation coe	efficient			
$r_{\mathrm{ab,c}}$	0.490**	0.543*	0.283	0.171		
$r_{\mathrm{ac.b}}$	0.395*	0.392	-0.148	0.688*		
$r_{\mathrm{bc,a}}$	-0.269	-0.179	-0.369	-0.044		

Table 5. Correlation analysis of migrants' background in Okinawa and permanency in the colony.

Variables: a, rates of persons settled in the colony by municipalities of their origin in Okinawa; b, rates of population engaged in the primary sector of economy by municipalities of Okinawa Pref. in 1965; c, number of emigrants by municipalities of their origin in Okinawa Prefecture.

Spearman's rank correlation coefficient. ** p < 0.01, * p < 0.05

² Districts were classified by municipalities.

Number of municipalities for each column is 16, 9, and 10, respectively.

was influential to the dwellers not only by its curtailment of land but also by its provision of a labour market for them. Not a few migrants to Bolivia had been temporary employees at military bases before emigrating.

The correlations shown in Table 5 for each group of areas categorized by the intensity of military exploitation indicate different patterns of affinity to the selected parameters. A quite similar result is shown for the area less influenced from military exploitation (0–9%), but the result for the areas with greater influence by military use (30% and over) is only significant in correlation between the size of emigrants and the rate of persons who settled in the colony. No significant correlations are found for the areas with intermediate influence by the U.S. bases, the relatively large value of negative correlation between the size of emigrants and the proportion of population engaged in the primary sector of economy being observed. In this group of areas included the urban core of Okinawa such as Naha, Urasoe and Ishikawa, which had been rapidly developing since the end of the war. We surmise that the effects of growing urbanization brought forth a mobilized population absorbed from the rural areas in the late 1950s, and some of these population should have been involved in emigration to Bolivia.

DISCUSSION

The permanency of the migrants in a new settlement is evaluated as a primary index of success of the colonization attempt from the viewpoint of colonization planners (STEARMAN, 1973). From the standpoint of individual colonists, the decision as to whether or not they remain in the colony does not necessarily parallel success or failure. It must be viewed in the spectrum of variations of adjustment behavior to pioneering conditions.

Several factors are responsible for the permanency of the colonists in a pioneer colonization. Some of the factors concern conditions of the newly created settlement, such as land productivity, proximity to market to sell the products, adequate communication networks, and financial aid and administration. The human factors are also relevant. Among them, the background characteristics of the migrants' place of origin have been pointed out to be effective on adjustment of the colonists in a new settlement (SARIOLA, 1960; STEARMAN, 1973). Although these factors are interrelated and it is difficult to make quantitative assessment of their relative contribution or to distinguish a single factor, the present analysis suggests that the background characteristics which the emigrants bore as an integral experiences of the place of their origin in the Okinawa could be correlated to the consistency of pioneering a new settlement.

From the limited materials, the likelihood of emigrants to remain in the colony is significantly correlated with the socioeconomic situation of the place of their origin. A significant point is the rural-urban contrast of their origin in Okinawa. Generally speaking, the emigrants from villages, where there was scarce availa-

bility of arable land and the population size was traditionally regulated by outward migration to the main island of Honshu, transferred their small herited property to their relatives or friends, and thus, there is no reason for them to go back again to their homeland. Their future lives are dependent only on large land holding in Bolivia which they can never get in their place of origin. This might favor the permanency of the migrants from municipalities with high proportion of population engaged in the primary sector of economy. Moreover, it is assumed for those from rural areas that, the larger the size of the emigrants from the same regional origin, the greater was availability of mutual support by the relatives or friends in a new settlement. This gives a convincing explanation to the positive partial correlation between the rate of those remaining and the size of emigrants, which was statistically significant when the effect of the rate of population under the primary sector of economy was eliminated. In contrast to those from rural areas, the emigrants from urbanized areas were assumed to have heterogeneous background characteristics. Since the emigrants from the urbanized core of Okinawa derived possibly from the post-war rural-to-urban migrants, they had experiences in different kinds of jobs and integration than those of rural origin. Their urban origin seemed to have favored their remigration. The remigrants generally moved out to destinations as non-agriculturists for whom the job experiences in Okinawa were of great help and made their decision to remigrate easier. According to the informants interviewed in Okinawa who had come back from Bolivia recently, they moved out searching for jobs in the cities of Bolivia, Argentina or Brazil after dispairing in the colony. Because they had some special skills other than agriculture, such as carpentering, motor vehicle driving, or commerce, they were able to weigh residential alternation in terms of pecuniary returns. It should be noted that the disappointment due to colonization seemed to differ from individual to individual as the satisfaction was dependent on value-attitudes in future expectation of colonization. The degree of realization of the colonist's prior expectation might be different between those of rural and of urban origin. Thompson (1973) pointed out that compared with those who had been coal miners, factory workers, or clerical employees the former agriculturists tended to satisfy themselves by acquiring larger land holdings which they could never hold in their native place.

The different patterns of affinity in correlations between the selected variables were shown when the influence of the U.S. military installation was taken into account. The less influenced areas with less than 10% of the land taken up for military use, gave results similar to those for the whole Okinawa. The results from the two groups of areas with more intensive influence of military curtailment were somewhat different from the former rusults. This may suggest that besides the selected ones there are some other variables which affect the permanency of the emigrants, but the different patterns seemed partially due to rapid and diversified changes in regional economy from area to area after the war. The group

from areas with intensive military installation which occupied over 30% of the land included villages of Kadena, Yomitan, Ginowan, and Chatan in the middle of Okinawa, a major center of paddy field cultivation before the war. Considering the post-war changes in economic structure which were greater in these areas, the statistics used in the present analysis, the Provisional Census of Okinawa in 1965, may not reflect the economic situation at the time-period of major migration to Bolivia. However, the rural trait of migrants' origin seems to be present in the statistically significant positive correlation between the number of emigrants and the rate of persons who settled in the colony. This is in agreement with the partial correlation for overall Okinawa. The group of areas with intermediate influence of military use, where no significant correlations were found, included Naha city and the urbanized core that developed after the war. The emigrants from the city of Naha were assumed to be the most sophisticated in the sense of value for colonization. Hypothetical indication by SHAW (1974), that those with previous migration experience would likely care to make cost-return calculation for migration, seems to meet the case for the emigrants of urban origin to Bolivia. Most of the emigrants from this group of areas, 511 individuals, came from Naha city, and each of other 8 municipalities sent below 100 individuals. The result probably represents the behavior of urbanized dwellers of Naha. If individualism, or scarcity of kinship networks and neighborhood ties, is the characteristics of urbanites, this seems to be reflected among the emigrants of urban origin.

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